

CLAIMS

1. A depilatory composition in the form of an aqueous alkaline gel comprising:

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(i) a first polymeric binder comprising a charged, cross-linked, water-soluble polymer;

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(ii) a second polymeric binder comprising a linear, water-soluble polymer;

(iii) a depilatory agent; and

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(iv) a buffer system capable of maintaining the pH of the composition at a value of from 10.5 to 13.0.

2. A depilatory composition as claimed in claim 1, wherein the cross-linked polymer of the first component is a cross-linked acrylic polymer, a cross-linked polyacrylamide or a copolymer of methyl vinyl ether and maleic anhydride cross-linked with dodecadiene.

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3. A depilatory composition as claimed in claim 1 or 2, which includes from 0.1 to 3.0% w/w of the first component.

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4. A depilatory composition as claimed in any of claims 1 to 3, wherein the second component comprises a linear, non-ionic polymer and/or positively charged polymer and/or negatively charged polymer.

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5. A depilatory composition as claimed in claim 4, wherein the second component comprises one or more of polyethylenimine, polyvinyl pyrrolidone, polyethylene oxide, polyethylene glycol, cellulose, hydroxy propyl cellulose, cetyl hydroxy ethyl cellulose, cetyl
5 hydroxy propyl cellulose, starch, a polyglucoside, a polysaccharide, guar gum, carrageenan, a sclerotium gum, a polypeptide, and a copolymer of sodium acrylate or of hydroxy ethyl cellulose with dimethyl diallyl ammonium chloride.

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6. A depilatory composition as claimed in any preceding claim, which includes from 0.2 to 3.0% w/w of the second component.

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7. A depilatory composition as claimed in any preceding claim, wherein the depilatory agent is potassium thioglycolate or thioglycerol.

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8. A depilatory composition as claimed in any preceding claim, including an accelerator for the degradation of keratin, such as urea, thiourea, dithioerythritol, ethoxydiglycol or methylpropyldiol.

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9. A depilatory composition as claimed in any preceding claim, including a buffer system comprising a silicate, arginine such as L-arginine, a nicotinate, polyethylenimine or a phosphate.

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10. A depilatory composition as claimed in any preceding claim and having a yield point of not more than 200 Pa.

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11. A depilatory composition as claimed in any preceding claim, wherein the shear rate needed to decrease the viscosity of the gel by half is in the range of from 10^{-2} s^{-1} to 200 s^{-1} , preferably from 1 s^{-1} to 50 s^{-1} .

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12. A depilatory composition as claimed in any preceding claim, in the form of a sprayable gel.

13. A process for producing a depilatory composition as claimed in any preceding claim, which process comprises:-

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(i) forming a first premix by mixing water and the first component; forming a second premix by mixing water, a buffer and the second component; and optionally forming a third premix by mixing a depilatory agent and a keratin degradation accelerator;

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(ii) adding a depilatory agent or the third premix to the second premix with stirring;

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(iii) adding the first premix to the resultant mixture with stirring; and

(iv) adjusting the pH to between 10.5 to 13.0.

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